

**NONRESIDENTIAL - HOTELS/MOTELS – HIGH-RISE RESIDENTIAL**

**RE-ROOF PERMIT APPLICATION  
2013 CALIFORNIA BUILDING & ENERGY CODES**

**FACSIMILE TRANSMITTAL SHEET**

Date: \_\_\_\_\_

From: \_\_\_\_\_

To: \_\_\_\_\_

Phone Number: \_\_\_\_\_

To Fax Number: (559) 498-4357

Fax Number: \_\_\_\_\_

Number of Pages Transmitted \_\_\_\_\_ including this page

**PERMIT #:** \_\_\_\_\_

**PROJECT ADDRESS:** \_\_\_\_\_

**OWNER:** \_\_\_\_\_

**CONTRACTOR INFORMATION:** \_\_\_\_\_

Company Name

Address

Phone Number

**BUILDING USE:**    ☐ ☐ Commercial Building    ☐ Hotel/Motel    ☐ High-Rise Residential

**VALUATION-TOTAL COST OF ROOFING MATERIAL AND LABOR:** \_\_\_\_\_

**PROPOSED ROOFING MATERIAL:**

☐ Wood Shake/Shingles    ☐ Asphalt Shingle/Composition    ☐ Single Ply    ☐ Metal

☐ Built-Up/Torch Down/Rolled    ☐ Heavy/Light Weight Tile    ☐ Foam/Liquid Coating    ☐ Other \_\_\_\_\_

Installed Weight of Tile: \_\_\_\_\_ Roof Slope: \_\_\_\_\_ Roofing Area: \_\_\_\_\_

☐ Overlay (Only one existing roof may remain)

☐ Tear Off (Cool Roof Material required if greater than 50% or more than 2000 sq. ft. is being altered, whichever is less)

☐ Cool Roof Exception Requested (see page 2 of this form)

**ROOFING MATERIAL INFORMATION & APPROVALS**

(Note: Material required to be on site for inspector's verification)

Manufacturer's Name \_\_\_\_\_ ICC Evaluation Report No. \_\_\_\_\_

CRRC Product ID No. \_\_\_\_\_ Solar Reflectance: \_\_\_\_\_ Thermal Emittance: \_\_\_\_\_ SRI: \_\_\_\_\_

**COMMENTS:** \_\_\_\_\_

**COOL ROOF PRODUCTS SHALL MEET THE REQUIREMENTS AS NOTED BELOW:**

**CALIFORNIA ENERGY CODE**  
**SECTION 141 ROOF REPLACEMENTS**  
**NONRESIDENTIAL - HOTELS / MOTELS – HIGH-RISE RESIDENTIAL**

STRUCTURE	LOW-SLOPE < 2/12	STEEP SLOPE	SOLAR REFLECTANCE (MINIMUM)	THERMAL EMITTANCE (MINIMUM)	SRI	NOTES
NONRESIDENTIAL	X		0.63	0.75	75	1-2-3-4
NONRESIDENTIAL		X	0.20	0.75	16	2-5
HOTELS/MOTELS- HIGH RISE RESIDENTIAL	X		0.55	0.75	64	2-3-4
HOTELS/MOTELS- HIGH RISE RESIDENTIAL		X	0.20	0.75	16	2-5

**NOTES:**

1. An aged solar reflectance less than 0.63 is allowed provided the maximum roof/ceiling U-factor in Table 141.0-B is not exceeded.

TABLE 141.0-B  
ROOF/CEILING TRADE OFF FOR AGED SOLAR REFLECTANCE

AGED SOLAR REFLECTANCE	U-FACTOR / R-VALUE	AGED SOLAR REFLECTANCE	U-FACTOR / R-VALUE
0.62-0.60	0.052 / 19.2	0.44-0.40	0.039 / 25.6
0.59-0.55	0.048 / 20.8	0.39-0.35	0.037 / 27.0
0.54-0.50	0.044 / 22.7	0.34-0.30	0.035 / 28.6
0.49-0.45	0.041 / 24.4	0.29-0.25	0.034 / 29.4

2. Roof areas covered by solar panels are not required to meet Cool Roof requirements.
3. Roof constructions that have thermal mass over the roof membrane with a weight of at least 25lb/ft<sup>2</sup> are not required to meet Cool Roof requirements.
4. If the existing roofing is removed to the roof deck, the exposed area must be insulated to R-14 value in addition to the installation of a Cool Roof. (Note: If foam plastic insulation is used the roof sheathing must be T&G, blocked, or minimum ¼" dens deck installed on the roof sheathing)

Proposed Insulation Manufacturer \_\_\_\_\_

Proposed Insulation Thickness \_\_\_\_\_

☐ Exception: The existing roof is insulated with at least R-7 insulation.

☐ Exception: Existing roof assembly has a U-factor lower than 0.089 (R-11.2).

☐ Exception: The AC units are not going to be lifted. The insulation may be limited to provide a minimum 8" exposure at the base flashing.

☐ Exception: The insulation may be less than R-14 if the wall base flashing would be reduced to less than 8" by the installation of the R-14, and the following apply:

- The walls are furnished with siding other than roofing; and
- The exterior wall siding would have to be removed; and
- Replaced roof area ÷ linear wall dimension ≤ 25.

5. The attic ventilation is required to meet current California Building Code requirements when roofing with composition shingles due to the manufacturer's warranty requirements. Ventilation area must equal one square foot for each 300 ft<sup>2</sup> of attic floor area. Vents must be installed with 50% high and 50% low. Low vents must be distributed equally around the structure. For large structures or structures with complex roof and attic areas, a roof plan shall be provided showing the location of existing and proposed attic vents.

## **ATTIC VENTILATION WORKSHEET**

### **STEP 1**

#### **Determine Total Square Feet of Attic Floor Space ("Enclosed" Attic Space)**

Length of Attic \_\_\_\_\_ x Width of Attic \_\_\_\_\_ = (a<sup>1</sup>) \_\_\_\_\_ Square feet of attic space  
(Repeat process for all attic areas)

Length of Attic \_\_\_\_\_ x Width of Attic \_\_\_\_\_ = (a<sup>2</sup>) \_\_\_\_\_ Square feet of attic space  
(Repeat process for all attic areas)

Areas without Attic Space / Unenclosed / Vaulted ceiling (b) = \_\_\_\_\_ Square feet

Net Ventable Attic Space (c) = \_\_\_\_\_ Square Feet (a) – (b) = (c)

### **STEP 2**

#### **Calculate Ventilation Requirement**

(c) \_\_\_\_\_ ÷ 300 = (d) \_\_\_\_\_ Square feet of code required ventilation

### **STEP 3**

#### **Convert Square Feet to Square Inches**

(d) \_\_\_\_\_ X 144 = (e) \_\_\_\_\_ **TOTAL square inches of code required ventilation**

### **STEP 4**

#### **Determine High & Low Ventilation Requirement**

(e) \_\_\_\_\_ ÷ 2 (high & low ventilation) = (f) \_\_\_\_\_ **Square inches of code required ventilation (high & low)**

### **STEP 5**

#### **Determine Number of Existing Vents and Proposed New Vents in order to meet Ventilation Requirement**

Existing High Vents: Number of vents \_\_\_\_\_ @ \_\_\_\_\_ square inches = \_\_\_\_\_ square inches  
Existing High Vents: Number of vents \_\_\_\_\_ @ \_\_\_\_\_ square inches = \_\_\_\_\_ square inches  
Proposed High Vents: Number of vents \_\_\_\_\_ @ \_\_\_\_\_ square inches = \_\_\_\_\_ square inches  
**Total High Ventilation to be provided = \_\_\_\_\_ total square inches**

Existing Low Vents: Number of Vents \_\_\_\_\_ @ \_\_\_\_\_ square inches = \_\_\_\_\_ square inches  
Existing Low Vents: Number of Vents \_\_\_\_\_ @ \_\_\_\_\_ square inches = \_\_\_\_\_ square inches  
Proposed Low Vents: Number of Vents \_\_\_\_\_ @ \_\_\_\_\_ square inches = \_\_\_\_\_ square inches  
**Total Low Ventilation to be provided = \_\_\_\_\_ total square inches**

#### **Example:**

Step 1 Attic Area: 60 ft x 20 ft = (a) 1200 sq ft & (b) = 0

(a) 1200 – (b) 0 = (c) 1200 sq ft

Step 2 Ventilation Calculation: (c) 1200 ÷ 300 = (d) 4 sq ft

Step 3 Convert to Sq Inches: (d) 4 sq ft x 144 = (e) 576 sq in

Step 4 High and Low Vent Area Req'mts: (e) 576 ÷ 2 = (f) 288 square inches

Step 5:

Provided Low Vents (intake): 6 soffit vents @ 48 square inches each = 288 square inches

Provided High Vents (exhaust): 6 dormer vents @ 48 square inches each = 288 square inches

Total Ventilation provided: = 576 square inches